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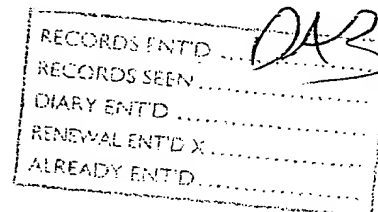
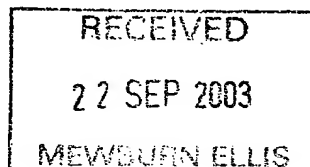
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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

TEGAL CORPORATION

Zeichen/Ref./Réf.

Anmelder/Applicant/Demandeur

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COMMUNICATION

The European Patent Office herewith transmits

- ☐ the European search report
- ☐ the declaration under Rule 45 EPC
- ☐ the partial European search report under Rule 45 EPC
- ☒ the supplementary European search report concerning the international application under Article 157(2) EPC relating to the above-mentioned European patent application. Copies of the documents cited in the search report are enclosed.

The following specifications given by the applicant have been approved by the Search Division :

☒ Abstract

☒ Title

☒ Figure

- ☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.
- ☐ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.

Figure:

- ☐ Additional copy(copies) of the documents cited in the European search report.

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-24, 28-46

A method for etching a wafer in
two steps, using a physical
process followed by a chemical
process

2. claims: 25-27

A method for creating vertical
side wall profile on a wafer
feature by creation and successive
removal of side wall veils

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
| X | US 4 659 449 A (WATANABE TORU) 21 April 1987 (1987-04-21) * column 4, line 3 - line 23 * * column 4, line 46 - column 5, line 23 * * column 6, line 34 - line 48 * | 1,28 | H01L21/302 |
| A | * figures 3A-3B * | 2,3,12, 16,31, 34,37-39 | |
| A | ----- EP 0 457 049 A (TOKYO SHIBAURA ELECTRIC CO) 21 November 1991 (1991-11-21) * page 5, line 39 - column 6, line 34 * ----- | 2-4,10, 12,13, 18,19, 34,35, 37-40 | |
| A | US 4 617 079 A (TRACY DAVID H ET AL) 14 October 1986 (1986-10-14) * the whole document * ----- | 31,32,44 | |
| | | | TECHNICAL FIELDS SEARCHED (Int.Cl.6) |
| | | | H01J H01L |
| LACK OF UNITY OF INVENTION | | | |
| <p>The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:</p> <p>see sheet B</p> <p>The present partial European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.</p> | | | |
| Place of search | | Date of completion of the search | Examiner |
| The Hague | | 25 April 2003 | Capostagno, E. |
| CATEGORY OF CITED DOCUMENTS | | <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document</p> | |
| <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> | | | |

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 90 3905

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

25-04-2003

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